

Subversive Space(s) in Interactive Fiction: Exploring Adam Cadre's *Photopia*

Evgenia Kleidona

The University of Sheffield International Faculty, CITY College, Thessaloniki, Greece.

Abstract

Working within the framework of Digital Media Studies, and drawing mainly on theories regarding interactivity and spatiality in Digital Media, this paper explores the significance of space as an integral element of interactive fiction, focusing on the case of Adam Cadre's *Photopia* (1998). Specifically, following Marie-Laure Ryan's theory on the multiple spaces of digital texts, the paper attempts to both define the peculiarities of each of *Photopia*'s spaces and examine the ways in which they interrelate and overlap. On this basis, the aim of the paper is twofold: first, to demonstrate how and to what extent *Photopia*'s spaces affect the player and the overall interactive experience; and, second, to bring to light the creative ways in which *Photopia* implements its spaces as a means of overcoming the genre's self-imposed limitations, thus expanding the genre's potential.

Keywords: interactive fiction, space, hypertext, agency, metafiction.

Setting the Theoretical Background: The Emergence of Interactive Fiction

Interactive fiction (IF) emerged in the United States at a time of rapid technological advancement, a time during which the increasing domestication of technology gave rise to new types of entertainment based on human-computer interaction. The first known work of interactive fiction can be traced back to 1976. It was in that year that Will Crowther, a computer programmer and avid caver, created a text-based game for his daughters, drawing on his own caving experiences. Involving a playable character who sets out to explore a huge cave in search of mythical treasures, the famous *Colossal Cave Adventure* (in short, *Adventure*) constitutes the precursor of the text adventure games, the most representative type of the interactive fiction genre.¹

The question that arises at this point is the following: what exactly is the role of space in interactive fiction? The answer to this question, partly implied by the content of *Adventure* as described above, emerges from the idiosyncratic nature of the genre as compared to more traditional narratives. First, although print works such as the *Choose Your Own Adventure* series,

¹ In his article, "Interactive Fiction: A New Literary Genre?" Richard Ziegfeld argues that, despite its links to traditional narratives, interactive fiction constitutes a new genre of its own since it embodies characteristics that distinguish it from other genres, such as "simulation" and "branching" (360, 370).

are also perceived as interactive, the term “interactive fiction” refers mainly to digital works (Douglas 6-7; Hayles and Montfort 454-46; Montfort 2).² Second, despite the fact that interactive fiction involves all three basic elements of traditional narratives, namely plot, characters, and setting, its underlying structure is fundamentally different. Espen Aarseth’s concise description is illuminating:

The formula was simple: take a popular fiction genre, for example the detective novel, create a background story (the more stereotypical the better, since the players would need less initiation), create a map for the player to move around in, objects to manipulate, characters to interact with, a plot tree or graph with several outcomes, depending on the player's previous decisions, and add descriptions, dialogue, error messages, and a vocabulary for the player. This literary database is accessed via a subprogram called a parser that interprets the player's input commands (e.g., hit dragon, eat sandwich, go north). Once an action has been identified, the program changes the database and displays a message about the outcome, until the player quits the game, wins, or “dies” and must start again. (100)³

A more recent work, Nick Montfort’s *Twisty Little Passages* provides a detailed description of the elements and mechanics of works of interactive fiction. Montfort’s work focuses on “those computer programs that display text, accept textual responses, and then display additional text in reaction to what has been typed” (vii). As Montfort further clarifies:

For a work to be interactive fiction, as the term is understood by those who use it today, it must be able to react to input meaningfully. The component that analyzes natural language input in an interactive fiction work is called the parser. A program is not interactive fiction if it simply prints the same series of texts, or a random series of texts, in response to input, or if it outputs some transformation of the input string without understanding that string. A textual work that offers an interface that does not accept natural language at times (e.g., it sometimes presents menus, or once in a while asks a question that is to be answered with y or n) can still be an interactive fiction work, however, as long as natural language is used in the normal framework for interaction. (vii-viii)

Apart from encapsulating the structure and function of a typical work of interactive fiction, both Aarseth’s and Montfort’s description reveals, at the same time, that the idiosyncrasy of

² Also, although in a general sense any piece of fiction that invites the narratee’s contribution can be characterized as interactive, from the 1980s onward the term has been used to refer to those works that revolve heavily around puzzles and exploration, following the form and structure of the typical text adventures (Short 289).

³ As in Aarseth’s description (100), the term “player” is used throughout this paper to refer to the person interacting with a work of interactive fiction.

interactive fiction lies, to a great extent, in the peculiarities of the medium and digitality itself. In *Hamlet on the Holodeck*, Janet H. Murray points out that digital environments possess four integral and intrinsic properties: they are procedural, meaning that their behavior relies on the execution of specific steps defined by a series of algorithms and rules; participatory, meaning that their behavior can be, in fact, induced by human input; encyclopedic, meaning that they can store big amounts of information which the user can retrieve; and, last but not least, they are spatial, meaning that they represent navigable space (71).⁴

Elaborating on the spatiality of digital texts, Marie-Laure Ryan identifies four different types of space: the space occupied by the text itself, for instance, in the form of the two-dimensional space on a computer screen; the architecture of the text, referring to the way that different parts of the text are linked to each other; the represented physical space of the fictional world, corresponding roughly to the game's setting; and, finally, the surrounding space that serves as context and container for the text itself ("Cyberspace, Cybertexts, Cybermaps"; "Space").

In light of both Murray's and Ryan's works, the significance of space as an integral part of interactive fiction becomes apparent. Being digital texts, works of interactive fiction involve all four types of space, although it is the first three, namely the space of the text itself, the textual architecture, and the represented space, that are the most prominent ones. It is exactly these three spaces that the paper attempts to shed light on.

The examination is further narrowed down, focusing on a particular work of interactive fiction, namely Adam Cadre's *Photopia*. The selection of this particular work is justified and can be better understood once *Photopia* is viewed within the broader context and history of interactive fiction. Like any other literary genre, interactive fiction is neither synchronically homogenous, nor diachronically static, and its dynamism is reflected in the variation and evolution of the genre itself. In fact, as Duncan Stevens describes, during the decade between 1994 and 2004, a notable change of course takes place in terms of the structure and content of works of interactive fiction (359-68). Specifically, shorter works start gaining ground gradually, and the focus on mere and often meaningless puzzle-solving, treasure-hunting and exploration, exemplified by early works such as *Adventure* and *Zork*, shifts towards new directions, including realistic characters and human relationships, or even bold experimentation with the limitations of the genre or narrative itself.

It is, thus, within this exact framework that Adam Cadre's *Photopia* is examined. Approaching it as a work of interactive fiction released during the aforementioned period, this paper attempts to showcase *Photopia* as an insightful example of how space(s) in interactive fiction can transform into vehicles of literary experimentation, innovation, or even (self)subversion.

⁴ As Murray further explains, the interactive nature of digital environments stems from the first two properties, while the remaining two properties are what make digital environments immersive (71).

Exploring *Photopia*'s Spaces

Upon its release, in 1998, Adam Cadre's *Photopia* became the winner of that year's XYZZY Awards, one of the most important annual events dedicated to interactive fiction. To this day, it is perceived as one of the most innovative for its time, and emotionally powerful works of interactive fiction. *Photopia* revolves around a particular character, a young girl named Alley, who dies in a car accident. Throughout *Photopia*, the player becomes immersed in a series of snippets or vignettes from Alley's life, from her infant years to the actual moment of the accident, which are, however, presented in a non-chronological order. By adopting the perspectives of different characters, the player is given the opportunity to get to know Alley and, gradually, reconstruct the events that lead to her tragic death, as shown in the following subsections.

Multiplying Perspectives and Splitting Realities through the Space of Photopia's Text

The significance of the textual space, the first type of space to be examined, does not only rest on the fact that the story of an interactive fiction work literally unravels line after line on the screen, but also in the fact that it constitutes the space where the actual interaction between the player and the game takes place. Not surprisingly, then, the first type of space that the player is met with in *Photopia* is the space materialized by the on-screen text itself.

Photopia begins with an almost empty black screen, containing only the following pair of lines: "Will you read me a story? / "Read you a story? What fun would that be? I've got a better idea: let's tell a story together." Without any other clues or hints provided to the player, they set off their journey through *Photopia* with a question already ringing in their head: who do these voices belong to and what is this story they are talking about? Of course, it is only at the end of this journey that the answer will be revealed.

As *Photopia*'s story progresses, a pattern in the visual display of the text on the screen becomes gradually apparent. While *Photopia*'s beginning appears in black fonts on a whitish background, the color scheme soon changes, and the player now encounters a black background and red fonts. This, however, changes again, and the black-and-white display appears, until the player is transferred to another black background. This time however the fonts are blue. This kind of alternation continues until the player reaches *Photopia*'s end.

Essentially, *Photopia* consists of a series of distinct blocks of text, or "scenes," which can be visually divided into two groups: the ones in which the text is presented in black font on a white background and the ones in which the text is presented on a black background in a different color every time. The transition from a black-and-white scene into a colored one is made explicit as each of the colored scenes is introduced by a screen with the corresponding heading: RED, SEA-BLUE, GOLD, SKY-BLUE, GREEN, and PURPLE.

Photopia's own title and its ambiguous reading as either *Photo*-pia or *Pho*-topia, highlights this interrelation between visuality and space. In fact, the last black-and-white scene, which also constitutes the final scene of *Photopia*, reveals the metafictional significance of this interrelation. In this scene, the character adopts the perspective of Alley's mother. Alley is just a baby in her

crib and both her parents are with her in the room. So, when Alley's mother asks her husband, Sam, about this new device he bought and already mounted on the ceiling above the crib, she, and through her the player, is informed that "Photopia" is an interactive LCD screen with multiple settings, one of which projects a set of colored circles moving and blending with each other.

Photopia literally constitutes a collection of visual "topoi," of places or spaces each demarcated from the others by its own color. This segmentation into colored spaces is not simply an aesthetic choice but serves a deeper interactional purpose. As Drucker points out, visual constructions, like architectural constructions, resemble language in the sense that they are all built on a certain set of structural units, which are meant to communicate specific types of information (25). Hence, "a visual system might be structured like a language. Style, motif, texture, color, and materials are all aligned with semantic elements while relations, composition, sequence, narrative were considered parts of a syntactic function" (Drucker 25). Referring to the minimal unit of a visual system, Fernande Saint-Martin introduces the term "coloreme" as a parallel to the term "phoneme," the smallest unit in language that carries meaning (16). Perceived in a similar way, *Photopia* constitutes not only a linguistic system, a "language" of its own, but a simultaneous and overlapping visual system, one that is built on a series of visual blocks, which in this case are literally color-blocks.

So, if the structural units of a system are meant to carry meaning, what is the meaning that *Photopia*'s color-blocks convey to the player? First, the mere sense of fragmentation that is created by the segmentation of the screen space plays a significant role, as will be shown in the following section. At the same time, however, as the player progresses through *Photopia*, and especially as they reach the end, they come to realize that the visual transition from one color-block to the next both *signifies* and *marks* a transition on a different level. It becomes apparent to the player that the visual transition from one on-screen space to the next is, actually, meant to reflect the simultaneous transition both between different character perspectives and between different narrative levels, which in turn correspond to different "realities." Despite the fact that throughout *Photopia* the player is addressed in the second person through the personal pronoun "you," the player soon realizes that every time they enter a new scene they acquire the perspective of another character. To be more specific, every time the player enters a black-and-white scene, they adopt the perspective of a character that is somehow related to Alley, such as Alley's mother, Alley's father, Alley's fellow-student, and, most importantly, Wendy, the girl whom Alley babysits regularly. In the colored scenes however, the player is immersed into a different level of reality, that of the fantasy world and epic adventures that Alley narrates to Wendy while babysitting her. Like *Photopia*, Alley's own stories are interactive. In fact, the main protagonist in Alley's stories is the brave astronaut Wendy MacKay, a fantasized version of little Wendy herself. Thus, when the player enters the colored scenes, they essentially adopt the perspective of the astronaut Wendy MacKay mediated through the perspective of little Wendy.

If the “meaning” communicated to the player through the multiple color-units is the multiplicity of character perspectives and realities, what is the actual interactional purpose of this multiplicity? In other words, what is the effect of this multiplicity on the player’s experience and engagement with the work? Paradoxically, the answer to this question lies in *Photopia*’s core element, its single central character. Despite all its fragmentation, what brings all the pieces of *Photopia* together is Alley herself. She is the centripetal force that glues all the characters together and, at the same time, draws the player into the story. This is exactly where the significance of the multiple character perspectives lies in *Photopia*. Getting to know Alley literally line by line through all the people whose lives she has impacted so heavily, and then having to deal with the idea of her tragic and inescapable death, is what makes *Photopia* so emotionally powerful.

At the same time, the visual contrast between the black-and-white scenes on the one hand, and the colored ones on the other, further highlights the contrast between the two reality levels. The symbolism is quite obvious. The black-and-white scenes represent the mundane and, at the same time, cruel reality of the world that Alley does not only live in, but, more importantly, dies in. The grimness of this world and the inescapability of Alley’s tragic end are emphasized when compared to Alley’s epic and colorful fantasy world, in which the superhuman Wendy MacKay manages to overcome all obstacles and save the day (and herself).

This analysis of *Photopia*’s on-screen space is aligned with both Murray’s and Ryan’s view of space as an integral part of digital texts and, by extension, of interactive fiction. At the same time, however, it reveals an additional and equally significant role of this type of space. Far from restricting its use as the communicational bridge between the player and the work, *Photopia* goes beyond this purely functional purpose of on-screen space, exploiting the spatiality of the digital medium to enhance the player’s intellectual and emotional engagement on top of the physical one.

Playing with Linearity through Photopia’s Textual Architecture

The examination of the first type of space in *Photopia*, namely the two-dimensional space of the text on the screen, has already introduced us to the architectural aspect of *Photopia*. Having examined the visual on-screen blocks of *Photopia*, it is now time to elaborate on the second type of space, the one consisting of the textual architecture of *Photopia*.

Photopia’s fragmented on-screen space inevitably brings to mind the fragmentation of a hypertext into a web of interconnected lexias. Taking into consideration that the very concept of textual architecture itself is, as Ryan points out, epitomized by the hypertext (“Space”), it becomes clear that the adoption of this structure in *Photopia* is anything but accidental.

Because of their textual architecture, hypertexts are inherently interactive. In a typical hypertext, the lexias are interconnected through hyperlinks, parts of text that lead to new lexias when the player clicks on them. By interacting with the hyperlinks, then, the player is enabled to navigate through the hypertext’s lexias and explore different paths, which is exactly why Ryan characterizes the interactivity of a hypertext as “exploratory” (“Beyond Myth and Metaphor”). In

fact, as Ryan explains, “the pioneers of hypertext dreamed their brainchild as the ultimate literary work, the sum of all possible narratives, the only text the reader will ever need because its meaning cannot be exhausted.” This view is based on the assumption that hypertexts embody both narrative nonlinearity, in the sense that the lexias are not arranged in a particular chronological order, and textual nonlinearity, in the sense that the player is not forced to access the lexias in a particular order (Aarseth 63).⁵

Photopia attempts to imitate this interconnection between a hypertext’s lexias through a series of associative links that establish a connection between *Photopia*’s own scenes. For instance, the first black-and-white scene ends with the phrase “the light stays an unmistakable red,” and, then, the player is transferred to the RED scene. At the end of the RED scene itself, the player encounters the phrase “you head for a splashdown” and is then introduced to the next black-and-white screen with the phrase “You hear a splash.” However, although these links that the player encounters throughout *Photopia* do create a sense of cohesion between *Photopia*’s scenes and allude to the underlying interconnectedness established through Alley, they also manage to highlight *Photopia*’s dissimilarity from the typical hypertext, since they do not have any interactive function whatsoever.

Essentially, through its textual architecture, *Photopia* plays on the juxtaposition between narrative and textual linearity. *Photopia* dismantles the traditional linear structure by narrating the events not only in a fragmented way, but also in a non-chronological order. For instance, the player encounters the scene of the car accident at the beginning, later encounters Alley in her childhood, then Alley in her adolescent years, while the journey ends with a scene where Alley is an infant. In between those scenes, the player is immersed into the fantasy world that Alley creates for Wendy. However, *Photopia* subverts this disruptiveness in terms of narrative linearity by imposing on the player its textual linearity, or, in other words, by imposing both a particular order of events and a particular order of accessing the text. For instance, the player cannot access the RED scene before first going through the first black-and-white scene, or cannot access the second black-and-white scene without first going through the RED scene. Eventually, by adopting a structure that superficially resembles a hypertext and then deviating from it in such an obvious way, *Photopia* manages to make the player aware of its textual linearity and its implications.

Nevertheless, this restriction is eventually more liberating than it initially seems. *Photopia*’s uniqueness stems from the player’s deep emotional engagement, and this engagement is achieved by inviting the player to discover (and keep re-discovering) the meaning of *Photopia* scene by scene. Because the challenge, then, lies in the player’s gradual reconstruction of the

⁵ In *Cybertext* (1997), Espen Aarseth transfers the concept of linearity from narratology into his discussion about textuality and links linearity to a particular variable of texts, that of *access* (63). In the context of textuality, linearity does not refer to the ordering of the events but to the way in which the narratee/reader can access the text itself. Simply put, a nonlinear text is a text that offers the narratee/reader random access to any of its parts at any point, while a linear text is one whose access is controlled and pre-determined by the narrator/author (63).

story, both types of linearity, the narrative and textual one, ensure that the player's emotional engagement builds up and *Photopia*'s impact is eventually even more powerful.

Challenging Agency through Photopia's Represented Space

Having so far examined the effects of both the two-dimensional on-screen space and *Photopia*'s textual architecture, it is now time to place the third type of space, that of the represented world, under the microscope.

Of course, since *Photopia* oscillates between two levels of reality, the represented space itself is split between two worlds. Interestingly, the symbolic juxtaposition between these worlds, which is highlighted through visual effects as we have already seen, is also manifested in the way that the player can interact both in and with the space of each world. It is not incidental, for instance, that, in the black-and-white scenes, interaction is mostly dialogue-based, while, in the colored ones, it is mostly action-based. In the black-and-white scenes, the player's interaction consists mostly in conversing with other characters through a menu-based system. This passive, automatized, and close-ended type of interaction reflects perfectly the essence of Alley's everyday reality, which is restrained by physical laws, and in which everyday events follow a deterministic path, often leading to tragic and inescapable outcomes. In the colored scenes, on the other hand, the player is required to explore areas, retrieve items, and manipulate them appropriately by typing the appropriate commands. In these scenes, interaction is challenging, dynamic, and open-ended, reflecting thus two main features of typical fantasy worlds: the fact that they are unconstrained by physical laws and the fact that they revolve around the concept of the quest. Hence, although *Photopia*'s textual architecture resembles a hypertext, the colored scenes actually imitate the structure and content of a typical text adventure.

As the title and content of the first work of interactive fiction, the *Colossal Cave Adventure*, imply, text adventures make heavy use of the third type of space to be examined, namely the represented space. In those works of interactive fiction, the represented space provides more than simply a background setting for the story to unfold. It is often the case that the represented space *is* the story, or at least a huge part of it, since in many works of interactive fiction the exploration of the fictional world is an end in itself. For instance, referring to the typical text adventure games, Ryan explains that

[t]hese games rely on a hidden map that specifies the location of various places with respect to each other; by typing commands such as "Go North" or "Go South," players move around the game world, find various useful objects, or encounter characters who help them solve a mystery. Success in the game is often a matter of being able to reconstitute the hidden map of the game world. ("Spatiality of digital media" 471)

Whether in the form of typing commands or choosing from a more limited set of actions, interactivity itself is infused with expectations. Let us bring to mind the four integral characteristics of digital environments according to Murray: they are procedural, participatory,

encyclopedic, and spatial (74). Thus, on the basis of the combination of the first two characteristics, being procedural and participatory, interactive environments are appealing and challenging, because, by definition, they award their user the ability to trigger and control the medium's behavior and function (Murray 74). When it comes to interactive narratives in particular, this interactive potential renders the narrative more powerful and enjoyable, because it offers the interactor not only a sense of immersion into the fictional world through their identification with the main character, but also a sense of gratification stemming from the thought that their choices and actions do matter and make a difference in the way the story unfolds ("Interactive Narrative" 292-93). Thus, as with any work of interactive fiction, the player engages with *Photopia* predicated on the assumption that, since the narrative itself invites their own input, their decisions and actions will indeed make a difference. This exact "satisfying power to take meaningful action and see the results of our decisions and choices" (Murray 126) is encapsulated in the concept of *agency*.

In this light, the represented space is more than an uncharted landscape for the player to explore. The satisfaction of interacting with the represented space does not lie simply in the element of surprise or excitement accompanying the "unlocking" of a new area; nor does it lie only in overcoming the challenge of orienting oneself. An additional and equally significant source of satisfaction comes from the player's assumption that the choices they make in terms of which path to take and how to interact with the represented space will actually affect the course of the game. Surprisingly, for a work of interactive fiction posing as a text adventure, *Photopia* comes with a twist, as the player soon comes to realize that, in both the black-and-white scenes and the colored ones, the agency they are supposedly granted is, more often than not, merely an illusion.

A characteristic example of this can be found in the RED scene. This is the scene in which the brave astronaut Wendy MacKay is required to explore the red planet in order to locate and salvage a valuable item. Standing in the "landing site," where her spaceship is located, Wendy can start her exploration. However, in order for the exploration to begin, the player is required to guide Wendy's steps by deciding which way Wendy should go and then, typing the appropriate command.

So, how do the player's own navigation choices affect Wendy's interaction with the planet's space? Let us examine all the possible outcomes, depending on the direction the player chooses. If, for instance, the player types the command "go north," another block of text appears on screen, revealing that Wendy has reached a new area:

>go north
 You take a few steps to the north, amazed at how the light gravity turns each step into a great bounding leap.
Near the huge tread

You are standing next to what seems to be a piece of a bulldozer or some other sort of construction equipment.

If the player wishes Wendy to keep heading north, Wendy will next reach the area “Among the ruins of the living quarters,” then the area “Among the ruins of the power plant,” then the area “Near the wrecked bulldozer,” then “Among the ruins of the greenhouse,” and she will eventually find herself “In the shallow crater.”

But, what if the player chose another direction for Wendy to follow, for instance, the exact opposite one? Here is the outcome when the player initiates Wendy’s exploration with the command “go south”:

>go south

You take a few steps to the south, amazed at how the light gravity turns each step into a great bounding leap.

Near the huge tread

You are standing next to what seems to be a piece of a bulldozer or some other sort of construction equipment.

Now, this is the outcome when the player guides Wendy westwards:

>go west

You take a few steps to the west, amazed at how the light gravity turns each step into a great bounding leap.

Near the huge tread

You are standing next to what seems to be a piece of a bulldozer or some other sort of construction equipment.

And, finally, this is the outcome of the command “go east,” which comes as no surprise:

>go east

You take a few steps to the east, amazed at how the light gravity turns each step into a great bounding leap.

Near the huge tread

You are standing next to what seems to be a piece of a bulldozer or some other sort of construction equipment.

Obviously, the player's decision has absolutely no effect on the progress and results of the exploration, since, in all four instances, the outcome is exactly the same. The player is met with similar results in the rest of the areas to be explored. Regardless of the direction or combination of different directions the player opts for, Wendy is bound to encounter the exact same areas in the exact same order.

The following excerpt from the GOLD scene constitutes another example of how the player's choices in the way that the character interacts with the surrounding space are rendered meaningless. While exploring a previous area encountered in the SEA-BLUE scene, Wendy comes across a shovel, and the player can decide whether Wendy will take the shovel with her or leave it there. Although the shovel is eventually of no use in the SEA-BLUE scene, it comes up again in the GOLD scene:

On the golden beach

You are right in the middle of the golden beach, which stretches off to the north and south. Something wooden is buried in the "sand" at your feet, but it's buried so deeply that only a corner of it is visible.

>dig

(the wooden corner)

Forget something? Like that shovel over the fireplace in the castle? Okay, we'll just pretend you had it all along. There, you've got the shovel. NOW try digging.

Unlike the previous example, the meaninglessness of the player's decisions, in this scene, is exposed in an explicit and rather crude way. The player is not only informed that a previous decision they have made has no effect whatsoever, but they are also made aware of the fact that the power they were supposed to have over the narrative actually lies in someone else's hands.

But what, perhaps, constitutes the cruelest instance of invalidation of the player's agency is encountered in the very first scene, where the actual accident that costs Alley her life takes place. In this scene, the player adopts the perspective of an unnamed character in a car, seated next to his drunk friend Rob, who is also the driver. When the player decides to interact with Rob, they are presented with the following menu:

>talk to Rob

Please select one:

(1) >ASK ROB ABOUT BLOOD ALCOHOL LEVEL

(2) >ASK ROB ABOUT THOSE CHICKS

(3) >YOU IDIOT, PULL OVER

If the player selects the first option, Rob's response appears on the screen:

“Lower than yours, bud,” Rob says. Rob looks at the scrap of paper with the address on it as the two of you go screaming through an empty intersection. “Aw, man, it’s a fake address! They gave us a f-- no, wait, it’s upside down.” He turns the paper right-side up. “Oh, hey, they’re right on Bartlett Hill Road. Sweet!”

After Rob’s response, however, the player is again presented with the two remaining options from the previous menu:

>talk to Rob

Please select one:

(1) >ASK ROB ABOUT THOSE CHICKS

(2) >YOU IDIOT, PULL OVER

Here is the outcome if the player again selects the first of the two choices:

“Yeah, we should figure out how we’re gonna split up those chicks,” Rob says. “I got dibs on the one that was wearing the blue thing.” His face falls. “Aw, no— what if they changed clothes?”

You look up.

“Hey, it’s red,” you say.

“Huh what?” Rob says.

“The light,” you say. “You know, red? As in STOP?”

But you don’t stop. You don’t even slow down as you fly into the intersection, and the light stays an unmistakable red...

Now, here is the outcome if the player decides to take drastic action and selects to confront Rob so that he stops the car:

“Only reason I’d pull the car over is to let you out and keep on going, dude,” Rob says.

You look up. “Hey, it’s red,” you say.

“Huh what?” Rob says.

“The light,” you say. “You know, red? As in STOP?”

But you don’t stop. You don’t even slow down as you fly into the intersection, and the light stays an unmistakable red. . . .

In this scene, the player’s powerlessness is materialized in two ways. First, the player is not assigned the perspective of the car’s driver but that of the driver’s friend. In this way, the player is both restricted from taking control of the car’s course themselves and, at the same time, in an almost sadistic way, forced to witness the fatal accident. Second, even when the player is seemingly given the opportunity to influence Rob’s driving, the eventual outcome is always the same: Rob drives into the intersection crossing a red light.

All three examples examined above bring to light *Photopia*’s metafictional level, since they reveal that *Photopia*’s effect does not lie simply in the invalidation of the player’s agency, but, most importantly, in the player’s realization of it. This observation leads us back to the discussion about the significance of *Photopia* as an insightful case of the evolution of interactive fiction. Not surprisingly, the emergence and popularization of interactive narratives has triggered an ongoing debate regarding both the potential and the boundaries of interactivity as part of narrative. It is not incidental, for instance, that Ryan characterizes interactive narratives as the “Holy Grail of digital entertainment” (“Interactive Narrative” 292), pointing out the paradoxical nature of interactive narrative as something extremely fascinating, yet hardly fully attainable.⁶ In *Digital Modernism*, Jessica Pressman examines a series of second generation electronic texts that “challenge assumptions about electronic literature that have become commonplace, such as expectations for reader-controlled interactivity or the assumption that electronic literature forfeits substantive content to formal experimentation” (2). Similarly, Emily Short points out that some works of interactive fiction explicitly expose this exact paradox through their strong meta-fictional message (290). Those works attempt to challenge the idea of player agency not only by deliberately depriving the interactor of their agency, but also by making the interactor aware of this deprivation in explicit ways (Short 290). The analysis so far confirms the categorization of *Photopia* as part of this exact group of works that “[draw] their readers’ attention to the inherent limitations of the traditional IF command parser, in order to bring to light some curious quirks and paradoxes inherent in the human self-conception as a species of free, autonomous agents” (Silcox 79).

It is important to notice, at this point, how *Photopia*’s spaces form a synergy in order to enhance the effect of this realization and facilitate *Photopia*’s metafictionality. For instance, although the unrealistic navigation in the RED scene can be encountered in other works of interactive fiction as well, in the case of *Photopia* it serves a special purpose. Since the colored

⁶ Elaborating further on this view, Sandy Louchart and Ruth Aylett argue that this paradox relies on the very nature and essence of narrative itself: in order for a narrative to fulfill the requirements of its own genre, the narrator is obliged to set restrictions on the narrative’s structure and content, thus depriving the narratee of at least full autonomy and agency (25).

scenes correspond to the stories that Alley narrates to Wendy, they are supposed to be narrated only once. Hence, the “glitch” in Alley’s interactive narratives will supposedly remain unnoticed by Wendy, since she is not meant to interact with the same story twice, and thus she will never be given the opportunity to experiment with different choices and compare the new outcomes to those of previous attempts. All that is required for Alley’s narratives to be engaging and immersive is that Wendy has the illusion of agency, the illusion that her decisions can affect the course of the story, while, in reality, Alley has already determined it. As is usually the case with works of interactive fiction however, the player is very likely to attempt more playthroughs, so as to experiment with different decisions. In fact, this is exactly what *Photopia* counts on. Once the player identifies the implied parallelism between *Photopia* itself and Alley’s interactive narratives, and then uncovers the illusion of their own agency in them, they are met with the shocking realization that they have no more control over Cadre’s *Photopia* than little Wendy has over Alley’s stories.

In the same vein, it is exactly because of *Photopia*’s fragmentation and linearity that the player’s awareness of their powerlessness comes gradually, since the player is first required to combine clues from multiple scenes. In this light, the powerful effect of the accident scene lies in the fact that the player is always forced to encounter it at the very beginning of *Photopia*. Because the player is not aware of what exactly happens in this scene at that point, the realization of its significance, in combination with the realization of their powerlessness to reverse or undo the scene’s outcome, comes as a shock. Even when the player engages in following playthroughs, in hopes that different decisions might unlock a different ending for Alley, the realization that any attempt is futile is all the more heartbreaking.

Concluding Remarks or Reinventing Interactivity through *Photopia*’s Spaces

It becomes apparent eventually that every type of space of *Photopia* that has been examined in this paper contributes, in its own way, to the enhancement of the player’s interactive experience. As we have seen, the fragmented two-dimensional space of the on-screen text reflects the multiplicity of character perspectives assigned to the player, which is what allows the player to become gradually familiar with, and increasingly attached to, Alley. Furthermore, the visual contrast between the black-and-white scenes and the colored ones is meant to highlight the contrast between the two worlds: the gloomy and deterministic world that Alley inhabits, and the exciting and full of possibilities fantasy world she creates in her imagination. This visual juxtaposition also facilitates the implied parallelism between Alley’s stories and *Photopia* itself, bringing to light the metafictional aspect of *Photopia*. Building on this effect, the extremely controlled access to, and limited navigability, of the space of the on-screen text imposed by *Photopia*’s pseudo-hypertextual architecture, serve a dual purpose: they deprive the player of the opportunity to produce alternative narratives and thus endings, while, at the same time, they fuel the player’s emotions built-up throughout *Photopia*. Finally, the metafictional and self-reflective message is conveyed in an even more powerful yet almost cruel way through the invalidation of

the player's agency in their interaction with and within the space of the represented world(s), and through the explicit exposure of this invalidation.

Despite all the aforementioned limitations imposed on the player that seem to render them completely powerless, the truth is that *Photopia* does offer its players a choice that makes all the difference. They have the choice to bypass huge blocks of conversation and rush through *Photopia* with minimum effort; or, on the contrary, to try out different conversational paths and engage in long and often tiring, yet extremely insightful interactions with *Photopia*'s characters, including Alley herself.

It is clear, then, that in *Photopia*, the player's engagement with space(s) is not an end in itself, but the means through which this particular work foregrounds and enhances the player's experience and emotional engagement with the characters. As an insightfully representative work of the experimental, post-commercial era of interactive fiction, *Photopia* manages to not only break free from the self-limiting obsession of earlier works with puzzles and extensive exploration, but also to utilize these elements with a twist, so as to redefine the significance of interactivity and expand the potential of the genre. Thus, although *Photopia* initially seems to sabotage the very essence of interactivity, it eventually achieves the exact opposite result: it proves that interactivity should not necessarily be "win"-oriented in order to offer a rewarding experience to the player. Focusing on the journey instead of the goal, *Photopia* proposes a different view of interactivity, one that prioritizes the opportunity to interconnect, understand, and reinterpret, over the power to be in control; and, as the immense popularity of *Photopia* has proved so far, this opportunity alone is often rewarding enough.

Works Cited

- Aarseth, Espen. *Cybertext: Perspectives on Ergotic Literature*. John Hopkins UP, 1997.
- Cadre, Adam. *Photopia*. 1998. IF Work.
- Douglas, J. Yellowlees. *The End of Books-or Books without End? Reading Interactive Narratives*. U of Michigan P, 2001.
- Drucker, Johanna. *Graphesis: Visual Forms of Knowledge Production*. Harvard UP, 2014.
- Hayles, Katherine N., and Nick Montfort. "Interactive Fiction." *The Routledge Companion to Experimental Literature*, edited by Joe Bray et al., Routledge, 2012, pp. 452-66.
- Louchart, Sandy, and Ruth Aylett. "Towards A Narrative Theory of Virtual Reality." *Virtual Reality*, vol. 7, no. 1, 2003, pp. 2-9, doi.org/10.1007/s10055-003-0114-9. Accessed 10 May 2018.
- Montfort, Nick. *Twisty Little Passages: An Approach to Interactive Fiction*. MIT P, 2005.
- Murray, Janet H. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. MIT P, 1997.
- Pressman, Jessica. *Digital Modernism: Making It New in New Media*. Oxford UP, 2014.
- Ryan, Marie-Laure. "Beyond Myth and Metaphor: The Case of Narrative in Digital Media." *Game Studies*, vol. 1, no. 1, 2001, gamestudies.org/0101/ryan/. Accessed 10 May 2018.

- . "Cyberspace, Cybertexts, Cybermaps." *Dichtung Digital*, no. 31, 2004, www.dichtung-digital.org/2004/1/Ryan/index.htm. Accessed 10 May 2018.
- . "Interactive Narrative." *The John Hopkins Guide to Digital Media*, edited by Marie-Laure Ryan et al., John Hopkins UP, 2014, 292-98.
- . "Space." *The Living Handbook of Narratology*, edited by Peter Hühn et al., Hamburg University, 2014, www.lhn.uni-hamburg.de/article/space. Accessed 10 May 2018.
- . "Spatiality of Digital Media." *The John Hopkins Guide to Digital Media*, edited by Marie-Laure Ryan et al., John Hopkins UP, 2014, pp. 470-74.
- Saint-Martin, Fernande. *Semiotics of Visual Language*. Indiana UP, 1990.
- Short, Emily. "Interactive Fiction." *The John Hopkins Guide to Digital Media*, edited by Marie-Laure Ryan et al., John Hopkins UP, 2014, pp. 289-92.
- Silcox, Mark. "'not that you may remember time': Interactive Fiction, Stream-of Consciousness Writing, and Free Will." *IF Theory Reader*, edited by Kevin Jackson-Mead and J. Robinson Wheeler. Transcript on Press, 2011, pp. 67-88.
- Stevens, Duncan. "Ten Years of IF: 1994-2004." *IF Theory Reader*, edited by Kevin Jackson-Mead and J. Robinson Wheeler. Transcript on Press, 2011, pp. 259-68.
- Ziegfeld, Richard. "Interactive Fiction: A New Literary Genre?" *New Literary History*, vol. 20, no. 2, 1989, pp. 341-72.